BIBLIOGRAPHY OF HAFNIUM

By Eleanor Abshire and Sarah Notestine

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BIBLIOGRAPHY OF HAFNIUM[1]

BY

ELEANOR ABSHIRE[2] AND

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Introduction

THE INCREASING use of hafnium as a vital component in atomic power reactors has brought this metal into recent prominence.

A literature survey was made, and this bibliography was compiled to provide research and production groups with a ready source of reference to this important metal and its compounds. This service is rendered by the Zirconium Information Center, which is sponsored by the Department of the Navy, Bureau of Ships, and the U.S. Department of the Interior, Bureau of Mines, at the Bureau's Northwest Electrodevelopment Experiment Station, Albany, Oreg.

The following reference sources have been reviewed for this compilation: Chemical Abstracts; Industrial Arts Index; Crerar Metals Abstracts; Nuclear Science Abstracts; Bureau of Mines Information Circular 7771, Bibliography of Zirconium; and Bureau of Mines Information Circular 7830, Bibliography of Zirconium, supplement to Information Circular 7771.

The material in this bibliography is arranged alphabetically by authors. Secondary authors are cross-indexed. Titles of periodicals or organizations are used as the authors of anonymous references.

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SELECTED ABBREVIATIONS

Abbreviation	*Journal title*
Acta Chem. Scand	Acta Chemica Scandinavica (Kjobenhavn).
Acta Cryst	Acta Crystallographica (Cambridge).
AICE Jour	American Institute of Chemical Engineers Journal.
Am. Jour. Clinical Pathology	American Journal of Clinical Pathology.
Am. Metal Market	American Metal Market.
Am. Mineral	American Mineralogist.
Am. Soc. Metals	American Society for Metals.
ASTM	American Society for Testing Materials.
Anal. Chem	Analytical Chemistry.
Anal. Chim. Acta	Analytica Chimica Acta.
Arkiv Fysik	Arkiv för Fysik (Stockholm).
Arkiv Kemi	Arkiv för Kemi (Stockholm).
Astrophys. Jour	Astrophysical Journal.
Atomnaya Energ	Atomnaya Energiya (Moskva).
Australasian Eng	Australasian Engineer (Sydney).
Auszüge Patentschr	Auszüge aus den Patentschriften (Berlin).
Bull. Am. Phys. Soc	Bulletin, American Physical Society.
Bull. Geol. Soc. America	Bulletin, Geological Society of America.
Canadian Jour. Chem	Canadian Journal of Chemistry.
Canadian Jour. Phys	Canadian Journal of Physics.
Canadian Min. Jour	Canadian Mining Journal (Toronto).
Chem. Age (London)	Chemical Age (London).
Chem. and Ind	Chemistry and Industry (London).
Chem. Eng	Chemical Engineering.
Chem. Eng. News	Chemical Engineering News.
Chem. News	Chemical News[4]
Chem. Processing	Chemical Processing.
Chem. Rev	Chemical Reviews.
Chem. Rundschau	Chemische Rundschau (Solothurn).
Chem. Weekblad	Chemisch Weekblad (Amsterdam).
Chem. Zentralb	Chemisches Zentralblatt (Berlin).
Compt. rend	Comptes rendus hebdomadaires des séances de l'académie des sciences (Paris).
Continental Met. and Chem. Eng. (Berlin)	Continental Metallurgical and Chemical Engineering (Berlin).
Current Sci. (India)	Current Science (India).
Dissertation Abs	Dissertation Abstracts.
Doklady Akad. Nauk SSSR	Doklady Akademii Nauk.
Geochim. Cosmochim. Acta (London)	Geochimica et Cosmochimica Acta (London).
Geol. Survey Bull	Geological Survey Bulletin (Ottawa).
Helv. Chim. Acta	Helvetica Chimica Acta (Basel, Genf).
Ind. Chemist	Industrial Chemist and Chemical Manufacturer (London).
Ind. Eng. Chem	Industrial and Engineering Chemistry.
Inst. Min. and Met. (London)	Institution of Mining and Metallurgy (London).
Iowa State Coll. Jour. Sci.	Iowa State College Journal of Science.
Izvest. Akad. Nauk SSSR Otdel. Khim. Nauk	Izvestiia Akademii Nauk SSSR Otdelenie Khimicheskikh Nauk (Moskva).
Jour. Am. Ceram. Soc	Journal, American Ceramic Society.
Jour. Am. Chem. Soc	Journal, American Chemical Society.
Jour. Appl. Phys	Journal of Applied Physics.
Jour. Chem. Educ	Journal of Chemical Education.
Jour. Chem. Phys	Journal of Chemical Physics.
Jour. Chem. Soc. (Japan)	Journal, Chemical Society (Japan).
Jour. Chem. Soc. (London)	Journal, Chemical Society (London).
Jour. chim. phys	Journal de chimie physique (Paris).
Jour. Electrochem. Soc	Journal, Electrochemical Society.
Jour. Inorg. and Nuclear Chem	Journal of Inorganic and Nuclear Chemistry (London).
Jour. Inst. Metals	Journal, Institute of Metals (London).
Jour. Iron and Steel Inst. (London)	Journal, Iron and Steel Institute (London).
Jour. Metals	Journal of Metals.
Jour. Optical Soc. America	Journal, Optical Society of America.
Jour. Optical Soc. America and Rev. Sci. Instr.	Journal, Optical Society of America and Review of Scientific Instruments.

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Abbreviation	*Journal title*
Jour. pharm. chim	Journal de pharmacie et de chimie (Paris).
Jour. Phys. Soc. (Japan)	Journal, Physical Society (Japan).
Jour. Res. Nat. Bureau of Standards	Journal of Research, National Bureau of Standards.
Jour. Sci. Ind. Res. (India)	Journal of Scientific and Industrial Research (India).
Jour. Soc. Chem. Ind. (England)	Journal, Society of Chemical Industry (England).
Kgl. Danske Videnskab. Selskab, Mat. fys. Medd.	Kongelike Danske Videnskabernes Selskab, Matematisk-fysiske Meddelelser (Kjobenhavn).
Mine and Quarry Eng	Mine and Quarry Engineering (London).
Mines Mag	Mines Magazine.
Monatsh. Chem	Monatshefte für Chemie und verwandte Teile anderer Wissenschaften (Wien).
Natuurk. Tijdschr. Ned. Indië	Natuurwetenschappelijk Tijdschrift voor Nederlandsch Indië (Weltevreden).
Phil. Mag	Philosophical Magazine (London).
Phys. Rev	Physical Review.
Phys. Ztschr	Physikalische Zeitschrift (Leipzig).
Planseeber. Pulvermet	Planseeberichte für Pulvermetallurgie (Reutte/Tyrol).
Proc. Am. Acad. Arts and Sci	Proceedings, American Academy of Arts and Sciences.
Proc. Cambridge Phil. Soc. (England)	Proceedings, Cambridge Philosophical Society (England).
Proc. Conf. on Applications of Isotopes in Sci. Res., Univ. Melbourne.	Proceedings of Conference on Applications of Isotopes in Scientific Research, University of Melbourne.
Proc. Internat. Cong. Pure and Appl. Chem. (London).	Proceedings, International Congress of Pure and Applied Chemistry (London).
Proc. North Dakota Acad. Sci	Proceedings, North Dakota Academy of Science.
Proc. Roy. Acad. Sci. (Amsterdam)	Proceedings, Royal Academy of Sciences of Amsterdam.
Proc. Soc. Experimental Biol. Med	Proceedings, Society for Experimental Biology and Medicine.
Rec. trav. chim	Recueil des travaux chimiques des Pays-Bas et de la Belgique (Leyden).
Rev. met	Revue de métallurgie (Paris).
Roy. Australian Chem. Inst	Royal Australian Chemical Institute Journal and Proceedings.
Sci. Am	Scientific American.
Sci. and Culture (Calcutta)	Science and Culture (Calcutta).
Soc. Chem. Ind. (London)	Society of Chemical Industry (London).
South African Min. and Eng. Jour	South African Mining and Engineering Journal (Johannesburg).
Uspekhi Khim	Uspekhi Khimii (Moskva).
Zavodskaya Lab	Zavodskaya Laboratoriya (Moskva).
Zhur. Anal. Khim	Zhurnal Analiticheskoi Khimii (Moskva).
Zhur. Fiz. Khim	Zhurnal Fizicheskoi Khimii (Moskva).
Zhur. Neorg. Khim	Zhurnal Neorganicheskoi Khimii (Moskva).
Ztschr. angew. Chem	Zeitschrift für angewandte Chemie (Leipzig).
Ztschr. anorg. Chem	Zeitschrift für anorganische Chemie (Hamburg and Leipzig).
Ztschr. Elektrochem	Zeitschrift für Elektrochemie und angewandte physikalische Chemie (Halle).
Ztschr. Krist	Zeitschrift für Kristallographie (Leipzig).
Ztschr. Metallkunde	Zeitschrift für Metallkunde (Berlin).
Ztschr. Naturforsch	Zeitschrift für Naturforschung (Wiesbaden).
Ztschr. Physik	Zeitschrift für Physik (Braunschweig).
Ztschr. physik. Chem	Zeitschrift für physikalische Chemie (Leipzig).

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